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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,526

09/19/2005

Peter Nesvadba

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3612

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EXAMINER

OH, TAYLOR V

ART UNIT

PAPER NUMBER

1625

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,526	Applicant(s) NESVADBA ET AL.	
	Examiner Taylor Victor Oh	Art Unit 1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Final Rejection

The Status of Claims

Claims 1-10 are pending.

Claims 1-10 are rejected.

Claim Rejections - 35 USC § 112

Applicants' argument filed 7/21/08 have been fully considered but are not persuasive.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The rejection of Claims 1-9 under 35 U.S.C. 112, second paragraph, has been withdrawn due to the modification of claim 1; however, regarding the claim 10, the rejection of Claim 10 under 35 U.S.C. 112, second paragraph, has been maintained in spite of the modification made in the claim 10.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

In view of the modification made in the claim 1 and applicants' argument,

The rejection of Claims 1-10 under 35 U.S.C. 102(b) as being anticipated clearly by Gillet et al (US 6,538,141) has been changed to the rejection of Claims 1-10 under 35 U.S.C. 103(a) as being unpatentable over Gillet et al (US 6,538,141).

The rejection of Claims 1-10 under 35 U.S.C. 102(b) as being anticipated clearly by Gillet et al (US 6,538,141) has been changed to the rejection of Claims 1-10 under 35 U.S.C. 103(a) as being unpatentable over Gillet et al (US 6,538,141).

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of

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35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillet et al (US 6,538,141).

.Gillet et al discloses the preparation of secondary nitroxide radicals in the following example (see col. 9 , Ex. 1):

EXAMPLE 1

Preparation of (2,2,6,6-tetramethyl-piperidine) N-oxide (TEMPO)

An organic solution consisting of 5 g of 2,2,6,6-tetramethylpiperidine (i.e. 0.0354 mol) dissolved in 20 ml of dichloromethane is prepared with stirring in a 100 ml round-bottomed flask fitted with 2 dropping funnels, a condenser, a pH-measuring probe and a stirrer. 20 ml of water are then added to this solution so as to have a two-phase system. Next, 10.8 g of a 40% solution of peracetic acid 4n acetic acid and aqueous 35% by weight K_2CO_3 solution are introduced (with stirring) slowly and simultaneously. The molar amount of peracetic acid introduced is 0.0568 mol, which corresponds to a peracetic acid/amine molar ratio of 1.6.

The amount of aqueous K_2CO_3 solution is adjusted such that the pH of the aqueous phase of the two-phase medium is maintained at between 7.2 and 7.5 in the course of the addition.

20 minutes after the addition, the total disappearance of the amine and the formation of TEMPO are found by gas chromatography (GC).

The reaction is stopped and K_2CO_3 solution is added so as to obtain a pH equal to 9, and the red-colored TEMPO is then extracted with CH_2Cl_2 .

Evaporation of the solvent gives 4.9 g of TEMPO with a melting point equal to 36° C. The purity of the TEMPO is checked by GC relative to a sample of pure product (purity greater than 99%) sold by the company Aldrich.

Mass spectrum (m/e): 157 (M+1)

The yield of TEMPO relative to the amine used is 88%.

However, the instant invention differs from the prior art in that the claimed base is used in the form of a solid instead of the aqueous basic solution in the prior art process.

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Even so, with respect to the use of the base in the form of the solid, the prior art does disclose potentially the use of the solid base in the process in consideration of a generic teaching which describes an aqueous solution of a carbonate or hydrogen carbonate of an alkali metal or of an alkaline earth metal so that the pH of the aqueous solution of the two phase medium is maintained at a value from 5 to 9 (see col. 3 ,lines 9-13); among the examples of carbonates of alkali metal or the alkaline earth metal elements, there are LiCO_3 and SrCO_3 , which are naturally slightly soluble in water according to Hawley's The Condensed Chemical Dictionary (see year 1971 ,8th ed., pages 523 and 829); therefore, they can partially remain in the solid form and be used in the solid form just as the claimed process is intended to perform it in that manner. Therefore, it would have been obvious to the skilled artisan in the art to be motivated to use the carbonates of alkali metal or the alkaline earth metal elements in a solid form in order to control the formation of water as well as the pH of the reaction mixture. This is because the skilled artisan in the art would expect such a manipulation to be within the purview of the skilled artisan in the art as shown in the prior art.

Applicants' Argument

Applicants argue the following issues:

- a. The high volume of water is produced by the prior art process unlike the claimed process;

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b. The claimed invention uses only enough water to dissolve the salts resulting from neutralization of the acids derived from the added peracid; tables 1 and 2 of the instant invention illustrate the differences in solubilities of these salts and the different amounts of water needed for the prior art process.

Applicants' arguments have been noted, but the arguments are not persuasive.

First, regarding the first and second arguments, the Examiner has noted applicants' arguments. However, as indicated in the above, in addition to the data of tables 1 and 2 of the instant invention, among the other examples of carbonates of alkali metal or the alkaline earth metal elements, there are LiCO_3 and SrCO_3 , which are naturally slightly soluble in water according to Hawley's The Condensed Chemical Dictionary (see year 1971, 8th ed., pages 523 and 829); therefore, they can basically be used in the solid form just as the claimed process is intended to perform it in that manner. Therefore, it would have been obvious to the skilled artisan in the art to be motivated to use the carbonates of alkali metal or the alkaline earth metal elements in a solid form in order to control the formation of water as well as the pH of the reaction mixture. This is because the skilled artisan in the art would expect such a manipulation to be within the purview of the skilled artisan in the art as shown in the prior art. Therefore, the prior art is still relevant to the claimed invention.

Therefore, applicants' argument is not persuasive.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taylor Victor Oh whose telephone number is 571-272-0689. The examiner can normally be reached on 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571-272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Taylor Victor Oh/
Primary Examiner, Art Unit 1625
10/26/08